

WHAT IS CLAIMED IS:

1. A non-reciprocal circuit element comprising:  
a flat plate-shaped ferrite part; and  
5 first, second, and third central conductors disposed  
over a plurality of surfaces of the ferrite part, wherein the  
first, second, and third central conductors on a top surface  
of the ferrite part are stacked on one another with first  
dielectric parts disposed therebetween, and portions of the  
10 first, second, and third central conductors intersect  
vertically,  
wherein the first, second, and third central conductors  
and the first dielectric parts are formed of multilayer thin  
films or thick films,  
15 wherein each of the first, second, and third central  
conductors includes a first extended portion which extends  
from one end of the corresponding central conductor and which  
is disposed on a side surface of the ferrite part and a  
second extended portion which extends from the other end of  
20 the corresponding central conductor and which is disposed on  
the side surface of the ferrite portion, and  
wherein the adjacent first and second extended portions  
facing each other with a second dielectric part, which is  
formed of a thin film or a thick film, disposed therebetween  
25 form a capacitor.

2. A non-reciprocal circuit element according to claim  
1, wherein each of the first and second extended portions

includes a longitudinal extended segment extending downward from one end of the corresponding central conductor and a lateral extended segment extending orthogonally to the longitudinal extended segment, and

5        wherein the lateral extended segments of the adjacent first and second extended portions face each other with the second dielectric part disposed therebetween to form the capacitor.

10        3. A non-reciprocal circuit element according to claim 1, wherein a first capacitor is formed between the first and third central conductors, a second capacitor is formed between the first and second central conductors, and a third capacitor is formed between the second and third central  
15        conductors.

4. A non-reciprocal circuit element according to claim 1, wherein a resistor formed of a thin film or a thick film is disposed on the side surface of the ferrite part, and the  
20        resistor is connected between the second extended portion of the first central conductor and the first extended portion of the third central conductor.

5. A non-reciprocal circuit element according to claim  
25        1, wherein the first and second extended portions include first and second terminal portions, respectively, which are disposed on a bottom surface of the ferrite part, each first terminal portion extending from one end of the corresponding

first extended portion, and each second terminal portion extending from one end of the corresponding second extended portion.

5           6. A non-reciprocal circuit element according to claim 5, wherein the second terminal portions are connected to one another by a connecting conductor disposed on the bottom surface of the ferrite part.

10           7. A non-reciprocal circuit element according to claim 5, further comprising:

          first and second yokes connected to each other to form a magnetic closed circuit;

          a magnet disposed on the ferrite part; and

15           a circuit board having first and second conductive patterns and holes,

          wherein the bottom surface of the ferrite part is placed on the circuit board,

          wherein the first terminal portions are respectively  
20          connected to the first conductive patterns, and the second terminal portions are connected to the second conductive pattern,

          wherein the first yoke is disposed on the top surface of the ferrite part, and the second yoke is disposed on a bottom  
25          surface of the circuit board, and

          wherein one or both of the first and second yokes are disposed inside the holes, thereby connecting the first and second yokes with each other.

8. A non-reciprocal circuit element according to claim  
5, further comprising:

first and second yokes connected to each other to form a  
5 magnetic closed circuit;

a magnet disposed on the ferrite part; and  
an insulated board having first and second leader  
terminals,

wherein the bottom surface of the ferrite part is placed  
10 on the insulated board,

wherein the first terminal portions are respectively  
connected to the first leader terminals, and the second  
terminal portions are connected to the second leader terminal,  
and

15 wherein the first yoke is disposed on the top surface of  
the ferrite part, and the second yoke is disposed on a bottom  
surface of the insulated board, thereby connecting the first  
and second yokes with each other.

20 9. A non-reciprocal circuit element comprising:

a flat plate-shaped ferrite part; and

first, second, and third central conductors disposed  
over a plurality of surfaces of the ferrite part, wherein the  
first, second, and third central conductors on a top surface  
25 of the ferrite part are stacked on one another with first  
dielectric parts disposed therebetween, and portions of the  
first, second, and third central conductors intersect  
vertically,

wherein the first, second, and third central conductors and the first dielectric parts are formed of multilayer thin films or thick films, and

wherein each of the first, second, and third central  
5 conductors includes a first extended portion which extends from one end of the corresponding central conductor and which is disposed on a side surface of the ferrite part; a second extended portion which extends from the other end of the corresponding central conductor and which is disposed on the  
10 side surface of the ferrite portion; a first terminal portion which extends from one end of the corresponding first extended portion and which is disposed on a bottom surface of the ferrite part; and a second terminal portion which extends from one end of the corresponding second extended portion and  
15 which is disposed on the bottom surface of the ferrite part.

10. A non-reciprocal circuit element according to claim 9, wherein the second terminal portions are connected to one another by a connecting conductor disposed on the bottom  
20 surface of the ferrite part.